WHAT IS CLAIMED IS:

1.   A method for detecting the presence of tumor cells in an animal suspected of having a tumor, comprising the steps of:

obtaining a sample from said animal; and

detecting expression of VEGF-B$_{186}$ from said sample, wherein detection of expression of VEGF-B$_{186}$ is indicative of the presence of tumor cells.

2.   The method of claim 1, wherein said animal is a mammal.

3.   The method of claim 1, wherein said animal is a human.

4.   The method of claim 1, wherein said animal is a rodent.

5.   A method for detecting the presence of tumor cells in an animal suspected of having a tumor, comprising the steps of:

obtaining a sample from said animal;

measuring the expression level of VEGF-B$_{186}$ in said sample;

determining the control expression level of VEGF-B$_{186}$ in an equivalent sample from an animal not suspected of having a tumor; and

comparing said measured expression level with said control expression level, wherein determination of an increased expression of VEGF-B$_{186}$ over the control expression is indicative of the presence of tumor cells.

6.   The method of claim 5, wherein said animal is a mammal.

7.   The method of claim 5, wherein said animal is a human.

8.   The method of claim 5, wherein said animal is a rodent.

9.   A method for detecting the presence of tumor cells in an animal suspected of having a tumor, comprising the steps of:

obtaining a sample from said animal;

determining the expression level of VEGF-B$_{186}$ in said sample;

determining the expression level of VEGF-B$_{167}$ in said sample; and

comparing said expression level of VEGF-B$_{186}$ with said expression level of VEGF-B$_{167}$,
wherein a comparison demonstrating a relative ratio of VEGF-B$_{186}$ to VEGF-B$_{167}$ greater than or equal to 28% is indicative of the presence of tumor cells.

10.   The method of claim 9, wherein said animal is a mammal.

11.   The method of claim 9, wherein said animal is a human.

12.   The method of claim 9, wherein said animal is a rodent.

13. A method for detecting the presence of tumor cells in an animal suspected of having a tumor, comprising the steps of:

obtaining a sample from said animal;

determining the expression level of $VEGF-B_{186}$ in said sample;

determining the expression level of $VEGF-B_{167}$ in said sample; and

comparing said expression level of $VEGF-B_{186}$ with said expression level of $VEGF-B_{167}$, wherein a comparison demonstrating a relative ratio of $VEGF-B_{186}$ to $VEGF-B_{167}$ greater than or equal to 50% is indicative of the presence of tumor cells.

14. The method of claim 13, wherein said animal is a mammal.

15. The method of claim 13, wherein said animal is a human.

16. The method of claim 13, wherein said animal is a rodent.

17. A kit for detecting the presence of tumor cells in an animal, comprising:

a receptacle adapted to receive a sample; and

a means for detecting expression of $VEGF-B_{186}$ in said sample, whereby detection of expression of $VEGF-B_{186}$ is indicative of the presence of tumor cells.

18. A kit for detecting the presence of tumor cells in an animal, comprising:

a receptacle adapted to receive a sample;

a means for determining an expression level of VEGF-B_{186} in said sample; and

a means for comparing said expression level of VEGF-B_{186} with a control level of VEGF-B_{186} in an animal absent tumors,

wherein determination of an increased expression level of VEGF-B_{186} over the control expression level is indicative of the presence of tumor cells.

19. A method for screening for anti-tumor agents, comprising:

applying a test agent to a tumor cell; and

detecting, by any suitable means, a decrease in expression of VEGF-B_{186} in the tumor cell.